



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/925,259

08/09/2001

Jonathan William Adams

AUS920010647US1

4214

7590

09/29/2005

Frank C. Nicholas
CARDINAL LAW GROUP
Suite 2000
1603 Orrington Avenue
Evanston, IL 60201

EXAMINER

NGUYEN, TAN D

ART UNIT

PAPER NUMBER

3629

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/925,259

Applicant(s)

ADAMS ET AL.

Examiner

Tan Dean D. Nguyen

Art Unit

3629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/9/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 8/9/01 was filed after the mailing date of the application on 8/9/01. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 101

2. **35 U.S.C. 101 reads as follows:**

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent thereof, subject to the conditions and requirements of this title.

3. As an initial matter, the United States Constitution under Art. 1, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of

Art Unit: 3629

whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

4. Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions (3) include (1) "laws of nature", (2) "natural phenomena", and (3) "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (198 1). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Sirattlre Financial Group, Inc.* 149, F.3d 1368, 1973, 47 USPQZd (BNA) 1596 (Fed. Cir. 1998).

5. Mere idea in the abstract (i.e. abstract idea, law of nature, natural phenomena) that do not apply, involve, use or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e. physical sciences as opposed to social sciences, for example), and therefore are found to be non-statutory subject matter. For a process to pass muster, the recited process must somehow apply, involve, use or advance the technological arts.

6. This "two-prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to Gottschalk v. Benson, 409

Art Unit: 3629

U.S. 63, 175, USPQ 'IBNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

7. The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter is statutory, not on whether the product of the claimed subject matter is statutory, not on whether the prior art which the claimed subject matter purports to replace is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., but whether it "enhances" the operation of a machine. In *re Toma* at 857.

8. In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

9. The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co. at 1374*. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of

Art Unit: 3629

enablement issues and not on statutory grounds. Therefore, the court held that "whether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BPAI 2001).

10. Thus the present basis for a 35 USC 101 inquiry is a 2-prong test:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

11. **Claims 18, 19, 1-8, 9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

12. As to the 2nd-prong test, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result.

Art Unit: 3629

In the present case, as to claim 18 (step of), 19 (means for), the claimed invention appears to produce a result "for designing the architecture of the e-business solution", which is accepted (i.e., useful, concrete and tangible).

13. As to the 1st-prong test, independent claims 18 (step of), 19 (means for), 1 and its dependent claims, 2-8, 9, fail this test. Under this test, for a process claim to pass muster under the "technological arts" prong, the recited process must somehow apply, involve, use, or advance the technological arts.

In the present case, claims 18, 19, 1, 9 have no connection to the technological arts. The recited steps of merely:

"a) developing a business description ...

b) developing a pictorial presentation ...; and

c) establishing a plurality of patterns within pictorial representation, ... of the e-business solution", does not apply, involve, use, or advance the technological arts in a non-trivial way since all of the recited steps can be performed in the mind of a person, by use of a pencil and paper, then manually and physically presenting to another person. "Asking questions over the Internet or a computer network" is not sufficient to overcome this rejection since it is only a trivial use of technology, such as sending a request by e-mail, while all the other steps as mentioned above may be mental or manual only.

14. Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts in a non-trivial way as explained above, claims 18, 19, 1-8, 9 are deemed to be directed to

Art Unit: 3629

non-statutory subject matter.

15. To overcome this rejection the Examiner recommends that Applicant amend the claims to better clarify which of the steps are being performed within the technological arts, such as incorporating a computer network or electronic network into some of the steps; for example:

b) developing a pictorial representation of the business description using a computer network.

The other claims could be similarly amended to include a computer network or a computer, in a significant way, in at least some of the steps.

See also (1) In re Schrader, 22 F.3d 290, 30 USPQ2d 1455 (CCPA 1994), (2) In re Alappat, 33 F.3d at 1544, 31 USPQ2d at 1557, (3) In re Waldbaum, 173 USPQ 430 (CCPA 1972), (4) In re Musgrave, 167 USPQ 280 (CCPA 1970), and (5) In re Johnston, 183 USPQ 172.

Claim Rejections - 35 USC § 112

16. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

17. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claim fails to include at least one example, or demonstration to show

Art Unit: 3629

how the process of claim 1 or 18 works. For example, what is an architecture of an e-business solution and how this architecture of the e-business solution can be derived from the features of the e-business solution? The examiner has read the specification at least twice and has no clear understanding of what are the claimed invention. The examiner has give this case to another examiner who has a degree in MIS and an MBA and this examiner has the same problem. The specification merely explains the claims but contains no examples of how the inventions work.

18. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1) In claim 18, the last step is vague and indefinite. It's not clear what this phrase means "the patterns being indicative of various implementations of the business description whereby the pictorial representation serves as a documentation for designing the architecture of the e-business solution". What is the relationship between "the pictorial representation serves as a documentation" has to do with the patterns and designing the architecture. Applicant needs to cite an example of what this means. Furthermore, there is no discussion with respect to "e-business" in the body of the claim. Is the method strictly limited to e-business solution or any business solution regardless whether they are e-business or not?

2) Claims 19-20 are rejected for the same reasons set forth in claim 1 above.

Art Unit: 3629

3) In claim 1, it's not clear the relationship between the four cited patterns and how they are connected to produce a method for designing an architecture for an e-business solution.

4) It 's not clear how dep. claim 8 (part of 1) further limits claim 1, for example, what step?

5) Claim 9 (apparatus to carry out method claim 1) is rejected for the same reason set forth in claim 1 above.

Claim Rejections - 35 USC § 102

19. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

20. **Claims 10-17, 20 are rejected under 35 U.S.C. 102(e) as being anticipated by CALVER (US 2001/0032092).**

As for independent product claims 10, 20, CALVER discloses a computer program product in a computer readable medium {see claims 21, 31}. As for the rest of the limitations in claims 10-17, 20, they have no patentable since the computer readable code do not instruct a computer to carry out any steps. In other word, there are no computer connected to the code or involved, so these are merely code.

Art Unit: 3629

As for dep. claims 11-17 (part of 10), they are rejected for the same reasons set forth in claim 10 above.

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. **Claims 18, 19, 1-8, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over CALVER in view of GRYPHON et al (US 6,233,537).**

As for independent method¹ claim 18, GRYPHON et al discloses a workflow modeling of business applications composed of multiple plan elements having pictorial representation and business rules (patterns) to control the business actions {see Figs. 1-5}. GRYPHON et al fairly teaches the claimed invention except for dealing business application concerning e-business solution. CALVER is cited to teach a method for designing an architecture/format for an e-business solution to provide benefits of providing valuable financial, marketing, and business development information to small business {see [0016, 0003, 0010, 0052, 0054, 0081]}. It would have been obvious to modify the teachings of GRYPHON et al by including application dealing e-business solution as taught by CALVER for at least one of the benefit cited above.

As for independent apparatus¹ claim 19, which is an apparatus to carry out the method of claim 18 above, "means for " instead of "step of", it is rejected for the inherent apparatus to carry out the method steps of 18 by GRYPHON et al /CALVER above.

Art Unit: 3629

As for independent method² claim 1, which is similar to method claim 18 above with more specific business patterns establishing steps (vs. plural of steps), these are fairly taught in GRYPHON et al Figs. 7A-10 and would have been obvious to do so if necessary. Note also that mere duplicate of parts for multiple effects are well known and would have been obvious to a skilled artisan. In re Hazra, 124 USPQ 378.

As for dep. claims 2-8 (part of 1 above), the further implementations of steps (a) – (c) of claim 1 above, which depends on each specific business application, types of desired business descriptions, types of desired business pictorial representations, types of business patterns, etc., and the selection of various combinations of these parameters would have been obvious to a skilled artisan since they depend on desired applications.

As for independent apparatus² claim 9, which is an apparatus to carry out the method of claim 1 above, “means for ” instead of “step of”, it is rejected for the inherent apparatus to carry out the method steps of 1 by GRYPHON et al /CALVER above.

Conclusion

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) U.S. Patent 5,819,267 is cited to teach method and apparatus for know-how management.

2) U.S. Patent 5,940,817 is cited to teach method and apparatus for problem solving.

3) US 6,385,609 is cited to teach system and method for analyzing and displaying report output.

No claims are allowed.

Art Unit: 3629

24. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through private PAIR only. For more information about the PAIR system, see <http://pair-direct@uspto.gov>. Should you have any questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

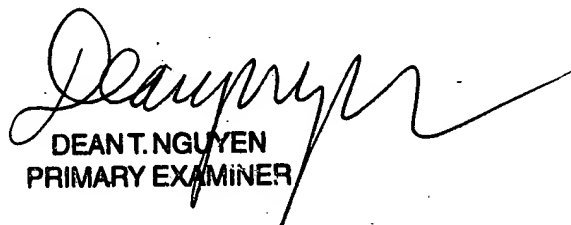
In receiving an Office Action, it becomes apparent that certain documents are missing, e. g. copies of references, Forms PTO 1449, PTO-892, etc., requests for copies should be directed to Tech Center 3600 Customer Service at (571) 272-3600, or e-mail CustomerService3600@uspto.gov.

Any inquiry concerning the merits of the examination of the application should be directed to Dean Tan Nguyen at telephone number (571) 272-6806. My work schedule is normally Monday through Friday from 6:30 am - 4:00 pm. I am scheduled to be off every other Friday.

Should I be unavailable during my normal working hours, my supervisor John Weiss can be reached at (571) 272-6812.

The main FAX phone numbers for formal communications concerning this application are (571) 273-8300. My personal Fax is (571) 273-6806. Informal communications may be made, following a telephone call to the examiner, by an informal FAX number to be given.

dtn
September 28, 2005


DEANT. NGUYEN
PRIMARY EXAMINER